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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/828,279

04/21/2004

Tat Nin Lui

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03/09/2006

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EXAMINER

PRESTON, ERIK D

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

25

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/828,279	LUI, TAT NIN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Erik D. Preston	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-11 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is/are objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15 & 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There was no mention in the originally filed specification of the enclosure being thermally insulating.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,2,4-9,14,16 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filander et al. (US 3294182) in view of Heinze et al. (US 5731646).

With respect to claim 1, Filander teaches a power hand tool comprising: A body (Fig. 1, #4); an electric motor (Fig. 1, #5) located in the body and having a shaft (Fig. 1, #6) for driving a connector (Fig. 1, #7) for connecting and driving an implement, the motor having a motor casing (Fig. 1, #2); an enclosure (Fig. 1, #18) located within the body and having an open end, wherein the motor is disposed within the enclosure, the enclosure including a thermally conductive (all mater is thermally conductive) enclosure

Art Unit: 2834

part (Fig. 1, #3) engaging and enclosing the open end of the enclosure, but it does not teach that the motor casing is metal, or a thermal conductor within the enclosure and in contact with the metal motor casing and the enclosure part for conducting heat from the motor to the enclosure part for heat dissipation. However, Heinze teaches a motor enclosure (Fig. 3) including a metal motor casing (Fig. 3, #1) and a thermal conductor (Fig. 2, #8 & 9) within the enclosure for making contact with the metal motor casing and an enclosure part (it would inherently conduct heat from the motor to the enclosure part for heat dissipation). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the enclosure of Filander in view of the enclosure as taught by Heinze because it provides a means for providing a long-service high-resistance electric motor having an improved ability to dissipate heat (Heinze, Col. 1, Lines 36-41) that is inexpensive to manufacture (Heinze, Col. 1, Lines 10-12).

With respect to claim 2, Filander in view of Heinze teaches the tool of claim 1, and Filander teaches that the enclosure part is outside of the body (as seen in Fig. 1).

With respect to claim 4, Filander in view of Heinze teaches the tool of claim 1, and Filander teaches that the enclosure part is positioned in close proximity of the connector.

With respect to claim 5, Filander in view of Heinze teaches the tool of claim 4, and Filander teaches that the enclosure part has an apertured portion through which the connector extends from inside the enclosure (as seen in Fig. 1).

With respect to claim 6, Filander in view of Heinze teaches the tool of claim 5, and Filander teaches that the apertured portion is tubular and supports the connector

Art Unit: 2834

for rotation (as can be seen in Fig. 1, there is no open area between the rotating connector and the apertured portion).

With respect to claim 7, Filander in view of Heinze teaches the tool of claim 1, and Heinze teaches that the thermal conductor is in surface contact with an end wall of the motor casing (the thermal conductor and the casing are integrally connected) through which the motor shaft projects (the motor shaft projects through the casing).

With respect to claims 8 & 9, Filander in view of Heinze teaches the tool of claim 1, but it does not teach that the thermal conductor is secured by screws to the motor casing, or that the thermal conductor is secured by screws to the enclosure part. However, screws were well known in the art at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to use screws to secure the thermal conductor to either the motor casing or the enclosure part because they provide a cheap, removable, and simple means for closing the inner housing of Filander, and also since it has been held that making a one piece component into two separate pieces is not considered to be patentably distinct (*In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961)). Separating the thermal conductor from the casing, and then attaching the two pieces together with screws would not alter the utility of the device.

With respect to claim 14, Filander in view of Heinze teaches the tool of claim 1, and Heinze teaches that the enclosure is a generally tubular unitary body having a substantially closed end (once the motor shaft is in place, the upper end of the enclosure will be substantially closed) opposite the open end.

Art Unit: 2834

With respect to claims 15 & 17, Filander in view of Heinze teaches the tool of claims 1 & 14, and Heinze teaches that the enclosure is made of a plastic material (Abstract).

***Allowable Subject Matter***

Claims 10 & 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 10, while prior art does teach some of the material included in the claim, it does not teach the thermally conductor having a central part in contact with the metal motor casing, and opposed side parts in contact with the enclosure.

Claim 11, is dependent upon claim 10.

***Response to Arguments***

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the thermally conductive enclosure part is distinct from both the enclosure and the thermal conductor) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3155856, US 3244031, US 3651707, US 5789833, US 6104112, US 6300693, US 6429559 & US 6700237

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik D. Preston whose telephone number is 571-272-8393. The examiner can normally be reached on Monday through Friday 8-5.

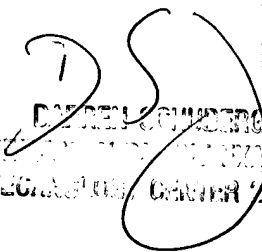
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



02/28/2006



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